

Error estimates for a Galerkin method with perturbations for spectral problems of the theory of dielectric waveguides

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Abstract

© 2016, Pleiades Publishing, Ltd. We obtain error estimates for a Galerkin method with perturbations for approximating eigenvalues and eigenfunctions of one class of abstract spectral problems. Using these results, we get the justification of applying the method for spectral problems of the theory of dielectric waveguides.

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Keywords

dielectric waveguides, Error estimates, Galerkin method with perturbations